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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Norio Nagai

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EXAMINER

MISLEH, JUSTIN P

ART UNIT

PAPER NUMBER

2622

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
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3 MONTHS

03/09/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/09/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 09/766,577	Applicant(s) NAGAI, NORIO	
	Examiner Justin P. Misleh	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, and 4 - 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 4 - 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 22 November 2006 has been entered.

Response to Arguments

2. Applicant's arguments filed 22 November 2006 have been fully considered but they are not persuasive.
3. Applicant argues, "in Kwono, the dragging starting point 'a' (corresponds to the "mark" recited in claims 1, 2, 8, and 9) is displayed after the amount of enlargement of the image is designated".
4. The Examiner respectfully disagrees with Applicant's position. As pointed out by Applicant (see Amendment, page 9), Applicant's claimed "mark indicative of a center point" refers to "arrow C1" shown in figures 2A and 2B of the present applicant. In further support thereof, the Examiner respectfully notes that page 8 (lines 12 – 16) of specification recites, "an arrow [C1] indicating the center of an electronic zoom area A2 is displayed on the full image" and page 8 (line 28) – page 9 (line 1) recites, "arrow C1 indicating the center of the area A2 is displayed on the full image."

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5. Like Applicant's "arrow C1", Kwono et al. show "dragging starting point 'a'" in figure 8. Specifically, Kwono et al. first state (see paragraph 0161), "the tip of the pen 41 presses on a dragging starting point 'a' of the touch tablet 6A disposed over the LCD 6 when a specified image is displayed on the LCD 6." Subsequently, as Kwono et al. state (again see paragraph 0161), "the pen tip is dragged while pressing against touch tablet 6A to a dragging ending point 'b'". The Examiner agrees with Applicant that dragging starting point "a" corresponds to the "mark" claimed in Claims 1, 2, 8, and 9.

6. However, the Examiner further submits that the dragging starting point "a" is displayed both prior to and after designation of the electronic zoom area (i.e., dragging of the pen input). In paragraph 109, Kwono et al. state that anytime "pen input is executed", the input and the image data are combined and "displayed on the LCD 6". Therefore, the Examiner respectfully concludes that since dragging starting point "a" is indicated on the display, by the pen input, as indicative of the center of an electronic zoom area, the starting point "a" is displayed on the display prior to electronic zoom designation and electronic zooming.

7. For these reasons, the Examiner will maintain the rejection.

Claim Objections

8. **Claim 4** is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

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The claim language simply recites, “wherein the center point of the designated electronic zoom area”, which fails to further limit previous Claim 1. For instance, Claim 1 already requires, in line 16, “the center point of the designated electronic zoom area.”

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1, 2, and 4 – 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowno et al. in view of Okamura in further view of Miyawaki et al.

The *Response* section above is fully incorporated into the following rejections.

Furthermore, the Examiner respectfully notes that apparatus Claim 8 is fully encompassed by apparatus Claim 1 and that method Claim 2 substantially and substantively parallels apparatus Claim 1. Accordingly, these independent claims will be rejected together.

Summary of Kowno et al.

Kowno et al. disclose, as stated in paragraphs 42, 56, 78, 81, 99, 157, 159, 162, 163, 170, 176, 184, and 185, an image sensing apparatus (1; figures 1 – 4) comprising optical zooming (via the lens system 3; figures 1 – 4) and electronic zooming (via CPU 39; figure 4) wherein the zooming is actuated via a standard telephoto/wide angle switch (15; figure 1) or via a user designation (see figures 8 – 11) on an display screen (via LCD 6; figures 2 and 4).

Kowno et al. also disclose that during image composition, when a preview image is displayed on the display screen (6), a user may operate the switch (15) or may designate, using the touch tablet (6A; figures 2 and 4), an area (via “a”, “b”, and “X” – figure 8) on the display screen (6) to perform zooming on the preview image (see transition from figures 8 → 9).

According to Kowno et al., the zooming maybe strictly optical zooming by adjusting the focal length of a lens system (3; paragraph 157), maybe strictly digital zooming by enlarging through interpolation (paragraph 157), or maybe a combination of optical zooming and digital zooming (paragraph 181).

Lastly, Kowno et al. disclose a strobe/flash (4) for illuminating a scene, as necessary, during image composition (paragraph 42, 78, and 99).

11. For **Claims 1, 2, and 8**, Kowno et al. disclose an image sensing apparatus (1) and a method of operating thereof comprising:

- an image sensing device (CCD 20) for sensing the image of a subject and outputting image data representing the image of the subject;

- a display control unit (CPU 39) for controlling a display unit (LCD 6) in such a manner that the image of the subject represented by the image data output from said image sensing device (CCD 20) will be displayed on a display screen (LCD 6), the display control unit (39) also displaying, on the image of the subject (figure 8), a mark (“dragging starting point ‘a’”) indicative of a center point of an electronic zoom area prior to designation of the electronic zoom area (see explanation below), the center point of the electronic zoom area being different from a center point of the image of the subject (The distinction between the original image with

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electronic zoom center point a in figure 8 and the electronically zoomed image in figure 9 also with center point a represents “different” center points. Also see paragraph 0162.);

a designating unit (Touch Tablet 6A) for designating the electronic zoom area (figures 8 and 9);

an electronic zoom device that electronically magnifies the image in the designated electronic zoom area (see figures 8 – 11);

a light-emission control unit (Strobe Driving Circuit 37) for controlling a strobe light-emission device (Strobe 4).

Specifically, Kwono et al. first state (see paragraph 0161), “the tip of the pen 41 presses on a dragging starting point ‘a’ of the touch tablet 6A disposed over the LCD 6 when a specified image is displayed on the LCD 6.” Subsequently, as Kwono et al. state (again see paragraph 0161), “the pen tip is dragged while pressing against touch tablet 6A to a dragging ending point ‘b’”. Hence, the dragging starting point “a” corresponds to the claimed “mark”. Also, in paragraph 109, Kwono et al. state that anytime “pen input is executed”, the input and the image data are combined and “displayed on the LCD 6”. Therefore, since dragging starting point “a” is indicated on the display, by the pen input, as indicative of the center of an electronic zoom area, the starting point “a” is displayed on the display prior to electronic zoom designation and electronic zooming.

While Kowno et al. teach illuminating an entire sensed image, which fully encompasses illuminating a part of the subject that corresponds to an image within the electronic zoom area in the entire sensed image and a recording control unit (CPU 39) for recording, on a recording medium (Memory Card 24), an image that has been captured by the image sensing device (CCD

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20) after the image has been composed; **Kowno et al. do not specifically disclose** a light-emission control unit that is for controlling a strobe light-emission device in such a manner that the strobe light-emission device illuminates precisely a position of a subject that corresponds to the center point of the designated electronic zoom area.

In regards to the light emitting angle, in analogous art, Okamura also disclose an image sensing apparatus and a method of operating thereof including designating a zoom feature. More specifically, Okamura teaches, as shown in figures 1 and 2 and as stated in columns 3 (lines 1 – 5, 34 – 45, and 62 – 67) and 4 (lines 1 – 20), an image sensing apparatus including a zoom switch (113) such that when the zoom switch (113) is operated, a zoom lens (102) is moved accordingly, wherein a flash control device (109), also included in the image sensing apparatus, controls an angle of illumination of the flash (110) to correspond to a zoomed sensed image. Moreover, Okamura “controls the illuminating angle of the flash device 110 according to the magnification varying information.” Therefore, Okamura provides said light control unit changing a light emitting angle of the strobe light-emission device based on the zoomed image, as claimed. The Examiner stresses since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom.

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have changed a light emitting angle of the strobe light-emission device based on the electronically magnified image, as suggested by Okamura, in the image sensing apparatus and corresponding method, disclosed by Kowno et al., for the advantage of “taking a

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shot of an object with an adequate amount of exposure” (see column 1, lines 20 – 22, of Okamura).

Although, **Kwono et al. in view of Okamura still do not disclose** recording on the recording medium image data output from said image sensing device AND data indicating position of the electronic zoom area OR image data representing the image with the electronic zoom area.

In regards to the recording, in analogous art, Miyawaki et al. also disclose an image sensing apparatus for sensing an image of a subject and a designating unit for designating an electronic zoom area in the image of the subject. More specifically, Miyawaki et al. teach, as shown in figures 11 – 13, an image sensing apparatus for sensing an image of a subject (101) and a designating unit (104) for designating an electronic zoom area in the image of the subject (see sequence in figure 12). Furthermore, Miyawaki et al. also teach, as shown in figure 14 and as stated in column 13 (lines 18 – 54), that an image corresponding to an image within the electronic zoom area (child image plane) and that the sensed image (total image plane) may be superimposed and recorded in a recording medium (103). Therefore, Miyawaki et al. provides recording on the recording medium (103) image data output from said image sensing device (total image plane) AND image data representing the image with the electronic zoom area (child image plane).

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art have recording on the recording medium image data output from said image sensing device and image data representing the image with the electronic zoom area, as taught by Miyawaki et al., in the image sensing apparatus, disclosed by Kowno et al. in view of

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Okamura, for the advantage of *providing a user perspective on the accuracy of user instructed image composition* (see column 14, lines 30 – 39, of Miyawaki et al.).

12. As for **Claim 4** (please see claim objection above), Kowno et al. disclose, as shown in figures 8 and 9, the center point of the designated electronic zoom area (dragging starting point “a”).

13. As for **Claim 5**, Kowno et al. disclose, as shown in figure 1, wherein said apparatus is a digital still camera (1).

14. As for **Claim 6**, Kowno et al. disclose, as stated in paragraphs 183 and 185, wherein said designating unit (Touch Tablet 6A) is a zoom-area designating switch of said digital still camera (1).

As shown in figure 2, the touch tablet (6A) is a part of the digital still camera (1). As stated in paragraphs 183 and 185, the touch tablet (6A) is used for designating the electronic zoom area on the image captured by the camera (1). Accordingly, the Examiner considers the touch table (6A) to be a zoom-area designating switch.

15. As for **Claim 7**, Kowno et al. disclose, as stated in paragraphs 50 and 157, wherein the electronic zoom device electronically magnifies the image in the designated zoom area by changing a downsampling ratio (“thinning”).

16. **Claims 9 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowno et al. in view of Okamura.

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The *Summary of Kowno et al.* section above is fully incorporated into the following rejections. Additionally, the *Response* section above is fully incorporated into the following rejections.

17. For **Claim 9**, Kowno et al. disclose an image sensing apparatus (1) and a method of operating thereof comprising:

an image sensing device (CCD 20) for sensing the image of a subject and outputting image data representing the image of the subject;

a display unit (LCD 6) for displaying the image of the subject (figure 8) represented by the image data, the display unit (LCD 6) also displaying, on the image of the subject (figure 8), a mark (“dragging starting point ‘a’”) indicative of a center point of an electronic zoom area prior to designation of the electronic zoom area (see explanation below), the center point of the electronic zoom area being different from a center point of the image of the subject (The distinction between the original image with electronic zoom center point a in figure 8 and the electronically zoomed image in figure 9 also with center point a represents “different” center points. Also see paragraph 0162.);

an electronic zoom device that designates (Touch Tablet 6A) an electronic zoom area (figures 8 and 9) in the image of the subject and electronically magnifies the image in the designated electronic zoom area (see figures 8 – 11), and specifies a center point of the electronic zoom area (see explanation below), the specified center point being different from a center point of the image of the subject represented by the image data output from said image sensing device (The distinction between the original image with electronic zoom center point a in figure 8 and

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the electronically zoomed image in figure 9 also with center point a represents “different” center points. Also see paragraph 0162.); and

a light-emission control unit (Strobe Driving Circuit 37) for controlling a strobe light-emission device (Strobe 4).

Specifically, Kwono et al. first state (see paragraph 0161), “the tip of the pen 41 presses on a dragging starting point ‘a’ of the touch tablet 6A disposed over the LCD 6 when a specified image is displayed on the LCD 6.” Subsequently, as Kwono et al. state (again see paragraph 0161), “the pen tip is dragged while pressing against touch tablet 6A to a dragging ending point ‘b’”. Hence, the dragging starting point “a” corresponds to the claimed “mark”. Also, in paragraph 109, Kwono et al. state that anytime “pen input is executed”, the input and the image data are combined and “displayed on the LCD 6”. Therefore, since dragging starting point “a” is indicated on the display, by the pen input, as indicative of the center of an electronic zoom area, the starting point “a” is displayed on the display prior to electronic zoom designation and electronic zooming.

While Kowno et al. teach illuminating an entire sensed image, which fully encompasses illuminating a part of the subject that corresponds to an image within the electronic zoom area in the entire sensed image and a recording control unit (CPU 39) for recording, on a recording medium (Memory Card 24), an image that has been captured by the image sensing device (CCD 20) after the image has been composed; **Kowno et al. do not specifically disclose** a light-emission control unit that is for controlling a strobe light-emission device in such a manner that the strobe light-emission device illuminates precisely a position of a subject that corresponds to the center point of the designated electronic zoom area.

In analogous art, Okamura also disclose an image sensing apparatus and a method of operating thereof including designating a zoom feature. More specifically, Okamura teaches, as shown in figures 1 and 2 and as stated in columns 3 (lines 1 – 5, 34 – 45, and 62 – 67) and 4 (lines 1 – 20), an image sensing apparatus including a zoom switch (113) such that when the zoom switch (113) is operated, a zoom lens (102) is moved accordingly, wherein a flash control device (109), also included in the image sensing apparatus, controls an angle of illumination of the flash (110) to correspond to a zoomed sensed image. Moreover, Okamura “controls the illuminating angle of the flash device 110 according to the magnification varying information.” Therefore, Okamura provides said light control unit changing a light emitting angle of the strobe light-emission device based on the zoomed image, as claimed. The Examiner stresses since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom.

Therefore, at the time the invention was made it would have been obvious to one with ordinary skill in the art to have changed a light emitting angle of the strobe light-emission device based on the electronically magnified image, as suggested by Okamura, in the image sensing apparatus and corresponding method, disclosed by Kowno et al., for the advantage of “*taking a shot of an object with an adequate amount of exposure*” (see column 1, lines 20 – 22, of Okamura).

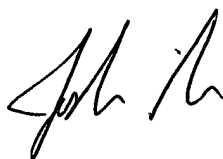
18. As for **Claim 10**, Kowno et al. disclose, as stated in paragraphs 50 and 157, wherein the electronic zoom device electronically magnifies the image in the designated zoom area by changing a downsampling ratio (“thinning”).

Conclusion

19. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Vivek Srivastava can be reached on 571.272.7304. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin Misleh
Examiner
GAU 2622
March 1, 2007